

MANAGEMENT OF INDIGENOUS KNOWLEDGE

The management of indigenous knowledge is essential because it helps to safeguard valuable knowledge from being lost, prevents unauthorized use and exploitation of knowledge, raises awareness and fostering respect for IK, facilitating the integration of IK into development initiatives for the benefit of communities and broader society and it helps to recognise the rights and knowledge of indigenous peoples.

The following are major steps in the management of IK as discussed by Mabawonku (2002):

i. Collection In collecting IK, there is a need to define the knowledge to be collected, and the likely inhibitors (that could disturb the collection of IK). The culture and knowledge systems have to be identified and taboos considered. The resource person (IK holder) has to be identified and the media to be used for documentation. The resource person or IK holder is the key figure in documenting IK. It is therefore important that she/he is not only knowledgeable, but is also seen as a reliable source. This is to ensure that the IK collected is reliable and authentic. Having more than one resource person would be an advantage especially if there are divergent opinions or some vital links or even if the knowledge has been distorted somehow (Mabawonku, 2002). Some IK is best collected at specific times or seasons. An example would be that IK from ceremonies can only be collected during the time of the ceremony, therefore collection should coincide with the most appropriate period so that collection of IK will be successful (Mabawonku, 2002).

ii. Organizing

If the IK has been recorded on cassette and/or video tapes, the next step is to edit the tapes and produce pictures and graphics. The content of the recording should then be summarized in writing either on computer or on a notebook, in other languages like English. Tapes must be labeled with labels containing bibliographic description and subject classification of the content (Mabawonku, 2002).

iii. Storage: The collected IK should be stored in large cupboards in an air conditioned room that is suitable for storage. More copies of the IK should be made on audio and /or vi

deo cassettes and circulated to other departments so that they could be borrowed if the need arises

iv. **Dissemination:** Dissemination of IK is very crucial in its management. This is because knowledge that is gained but is unavailable to others is wasted. IK dissemination should begin by distributing the collected IK to the respective indigenous groups (IK holders) and hand copies of their recordings distributed to other people. Abstracts and indexes that would create awareness of the collected IK should be compiled and made available (Mabawonku, 2002).

Other ways are

- **Respect for Indigenous Rights and Self-Determination:**
 - Recognizing the inherent rights of indigenous peoples over their knowledge and cultural heritage.
 - Obtaining Free, Prior, and Informed Consent (FPIC) for any access to or use of their knowledge.
 - Ensuring the participation of indigenous communities in all aspects of IK management.
- **Recognition of Traditional Governance Systems:**
 - Respecting and working with existing customary laws and institutions for knowledge transmission and management.
- **Cultural Sensitivity and Context Specificity:**
 - Acknowledging the diverse nature of IK and avoiding generalizations.
 - Adapting management strategies to the specific cultural and ecological context of each community.
- **Benefit-Sharing:**
 - Ensuring that indigenous communities equitably share any benefits arising from the use of their knowledge.
- **Documentation and Preservation:**
 - Developing culturally appropriate methods for documenting IK (e.g., audio-visual recordings, participatory mapping, community-based databases) with the full consent and involvement of knowledge holders.

- o Recognizing the limitations of written documentation for orally transmitted knowledge.
- **Intergenerational Transmission:**
 - o Supporting initiatives that facilitate the transfer of knowledge from elders to younger generations within communities.
 - o Integrating IK into educational curricula where appropriate and with community involvement.

The major challenges to the management and preservation of IK

1.Collection Development Policies: Library and information professionals should design collection development policies for indigenous knowledge. Library and information professionals should only become part of the indigenous knowledge management equation in so far as organizing the information and making it usable and accessible is concerned. Moreover, without a collection development policy one wonders where library and information professionals would start. Are they going to collect everything they perceive to be indigenous knowledge? Collecting for what clientele?

2.Protection Of Intellectual Property Rights

The major contentious issue in the management and preservation of IK is the protection of intellectual property rights. Intellectual property rights have been defined as legal rights that can attach to information emanating from the mind of a person if it can be applied to making a product that is made distinctive and useful by that information. There is an emerging debate on how to protect the intellectual property rights of IK practices. In this regard, the United Nations Draft Declaration on the Rights of Indigenous Peoples underscores the fact that indigenous peoples have the right to own and control their cultural and intellectual property pertaining to their sciences, technologies, seeds, medicines, knowledge of flora and fauna, oral traditions, designs, art and performances (United Nations, n.d.). In the same vein, the Economic Commission for Africa recommends that oral tradition and indigenous knowledge in African communities should be exploited in all their for

ms of expression, giving cognizance to the protection of intellectual property rights. (United Nations, 2001: 2)

Although most IK is held in the minds and practices of people, and is commonly held by communities rather than individuals, intellectual property rights that are intended to protect the ownership of the intellectual content of the works of an individual can be applied. In the Western tradition the intellectual property must be tangible, taking the form of a written document, a recording of music, a painting or drawing, and the like. Sometimes IK is tangible. For instance, there are songs, stories, music, statues, paintings, designs, processes and drawings that embody traditional knowledge. These areas of IK are capable of being protected either individually or communally. Traditional medicines also come to mind when one starts to think in terms of protecting intellectual property. Who can claim that traditional healers share their medicinal secrets with the whole community? Intellectual property rights should be upheld so that indigenous communities can benefit from the commercial use of their traditional knowledge. Once the information professionals have organized the indigenous information, they can invoke their knowledge of and skills in enforcing copyright matters to protect the intellectual property rights of indigenous people.

3. Access To Indigenous Knowledge

The primary aim of all information management activities is to provide access to collections and materials. According to Muswazi (2001:254), library and information services do not adequately address pertinent knowledge access issues. It is no wonder that access to the indigenous information collected so far is very limited, because it is not well organized in terms of being indexed and abstracted (Warren and McKiernan, 1995: 426). This partly explains the underutilization of IK in development projects (Mathias, 1995: 17). In addition, the lack of marketing strategies can also account for the low level of use of IK. Information professionals have a long tradition during which they have developed significant skills in the organization of knowledge. They can draw upon skills in constructing thesauri and compiling bibliographies as a key to making IK accessible and, by implication, utilized.

4. Thesauri

The problem of access to IK is compounded by a lack of standardized indexing terms and by inconsistent indexing policies. The use of a controlled vocabulary such as thesauri and other controlled lists of keywords, ontologies, classification systems, clustering approaches, taxonomies, gazetteers, dictionaries, lexical databases, concept maps/spaces, s

semantic road maps, etc. (Hill and Koch, 2001) can facilitate the organization of IK in information retrieval systems. The primary purpose of a thesaurus is to promote consistency in the indexing of documents and to facilitate searching. In other words, a thesaurus is the controlled index language that the indexer uses to interpret and represent the themes, concepts and language of documents.

The use of knowledge representation systems like thesauri is important in organizing and retrieving recorded IK, which tends to be multidisciplinary in nature. The use of a thesaurus will go a long way in aiding authors and publishers to make information more accessible by providing indexing information that uses controlled vocabulary or terms from a thesaurus, or by rendering other linguistic assistance to searchers and readers. Controlled vocabularies facilitate knowledge management and systematic access to knowledge systems.

5. Bibliographies

Library and information professionals should play a leading role in the compilation of annotated bibliographies that are descriptive and evaluative, in order to inform readers of the relevance, accuracy and quality of the IK held in various national information resource centres. The task of the compiler of a bibliography should be to:

- find out what materials on a particular subject exist
- describe them item by item
- assemble the resulting entries into useful arrangements for reference.

6. Storage And Preservation Media

Storage of IK is not limited to text documents or electronic formats; it could include cassette tapes, films, story telling, gene banks and others. In essence, all these media are impermanent. Information professionals should ensure the longevity of the documented IK by devising preservation strategies.

Other strategies are

Community-Based Initiatives:

- o Supporting indigenous communities in developing their own protocols and mechanisms for managing their knowledge.
- o Establishing community knowledge centers and cultural heritage sites.

- Promoting intergenerational knowledge transfer programs.
- **Policy and Legal Frameworks:**
 - Developing national and international laws that recognize and protect indigenous knowledge.
 - Implementing intellectual property rights regimes that are sensitive to the unique characteristics of IK (e.g., sui generis systems).
 - Ensuring the effective implementation of FPIC guidelines.
- **Partnerships and Collaboration:**
 - Fostering collaborations between indigenous communities, researchers, government agencies, NGOs, and the private sector based on mutual respect and benefit-sharing.
- **Education and Awareness Raising:**
 - Educating the public about the value and importance of indigenous knowledge.
 - Promoting intercultural understanding and respect.
- **Ethical Research Practices:**
 - Adhering to strict ethical guidelines when conducting research involving indigenous knowledge.
 - Ensuring transparency and accountability.
- **Technology and IK Management:**
 - Exploring the appropriate use of technology for documentation, preservation, and sharing of IK (with community control).

Problems of Generating and Using Indigenous Knowledge

The very process of generating and sustaining indigenous knowledge faces several challenges:

- **Oral Transmission and Loss:** Much IK is passed down orally through generations. This makes it vulnerable to loss due to the death of knowledge holders, lack of intergenerational transmission, and the fading of cultural practices.

- **Environmental Changes:** Shifts in climate, loss of biodiversity, and altered landscapes can render previously relevant IK less effective or even obsolete. Communities may need to adapt quickly, and existing knowledge might not suffice.
- **Cultural Erosion and Assimilation:** Globalization, modernization, and dominant cultures can lead to the abandonment of traditional practices and languages, which are often intertwined with IK. Younger generations may not see the value or relevance of this knowledge.
- **External Pressures and Resource Depletion:** Rapid population growth, reduced access to resources due to external pressures (e.g., land grabbing), and economic shocks can disrupt traditional knowledge systems and the practices that sustain them.
- **Internal Dynamics and Secrecy:** Some IK may be restricted due to cultural protocols, sacred beliefs, or gender roles within the community, making its generation and wider sharing challenging even within the community.
- **Lack of Documentation:** The predominantly oral nature of IK means there's often a lack of written records, making it difficult to preserve, verify, and build upon.
- **Research Challenges:** Studying IK requires deep cultural sensitivity, ethical considerations, and linguistic skills. Researchers may face difficulties in accessing communities, gaining trust, and accurately interpreting knowledge.
- **Loss of Context and Meaning:** IK is often deeply embedded in specific cultural practices, languages, and worldviews. Packaging it in standardized formats (e.g., written documents, databases) can strip away crucial context and distort its original meaning.
- **Language Barriers and Translation Issues:** Translating IK from indigenous languages to more widely used languages can be problematic due to a lack of direct equivalents, cultural nuances, and the potential for misinterpretation.
- **Ethical Considerations and Intellectual Property:** Packaging IK raises concerns about ownership, control, and the potential for misappropriation. Indigenous communities may be hesitant to share their knowledge if they fear it will be exploited without their consent or benefit.
- **Format Appropriateness:** Determining the most appropriate formats for packaging IK (e.g., written text, audio-visual materials, digital platforms) while respecting cultural norms and ensuring accessibility for knowledge holders can be challenging.

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- **Digital Divide and Technological Access:** Utilizing digital technologies for packaging and dissemination may exclude communities with limited access to infrastructure, technology, and digital literacy.
- **Misconceptions and Distrust:** Indigenous communities may view external efforts to package their knowledge with suspicion, fearing misrepresentation or the commodification of their cultural heritage.
- **Clash of Knowledge Systems:** Attempts to integrate IK into Western scientific frameworks for packaging can lead to the dominance of Western perspectives and the marginalization of indigenous epistemologies.
- **Lack of Recognition and Legitimacy:** Mainstream institutions and scientific communities often undervalue or dismiss IK, viewing it as anecdotal or unscientific. This can hinder its integration into policy and practice.
- **Integration with Modern Systems:** Finding appropriate ways to integrate IK with modern scientific knowledge, technologies, and governance systems can be complex and require bridging different worldviews and methodologies.
- **Benefit-Sharing and Equity:** Ensuring that indigenous communities benefit fairly from the use of their knowledge, especially in commercial applications, remains a significant challenge.
- **Accessibility and Dissemination:** Packaged IK may not always be accessible or understandable to the communities from which it originated or to other potential users due to language barriers, format limitations, or lack of effective dissemination channels.
- **Sustainability and Adaptation:** IK is dynamic, and its use needs to be adaptable to changing environmental and social conditions. Static packaging may not reflect this evolving nature.
- **Cultural Sensitivity and Misapplication:** Using IK without a deep understanding of its cultural context can lead to misapplication, unintended negative consequences, or disrespect for cultural values.
- **Conflicting Interests and Power Dynamics:** Power imbalances between indigenous communities and external actors can influence how IK is used, potentially prioritizing external interests over those of the knowledge holders.

- **Validation and Verification:** Establishing appropriate methods for validating and verifying the effectiveness and safety of IK within different contexts can be challenging, especially when it differs significantly from Western scientific paradigms.

THE ROLE OF INFORMATION PROFESSIONALS IN MANAGING AND PRESERVING IK

Managing and preserving IK will help to 'reduce poverty, enhance equity, reduce environmental degradation' and lead to sustainable development, as well as increased local participation in the development process (Warren and McKiernan, 1995: 426). Information professionals should be proactive in their approach to managing society's knowledge resources. They must ensure that indigenous knowledge, although based on orality and oral traditions, should be managed and preserved just like other documentary materials that are grounded in western codified knowledge schemes.

They should devise strategies for making indigenous information and knowledge accessible by:

- preparing inventories and registers of traditional knowledge systems, taking into account the intellectual property implications of such inventories and registries
- making IK accessible to the community, especially young people, by means of marketing strategies
- developing collection development policies for IK bearing in mind the implications of the storage media for its preservation
- developing standardized tools for indexing and cataloguing IK systems
- compiling bibliographies of IK resources.

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